

IN THE CLAIMS

Claims 1-20 (canceled)

21. (new) An electromagnetically controlled drive system for accessing a data storage medium, comprising:

a reflector element adapted to be responsive to an electromagnetic field and adapted to direct an optical signal toward the data storage medium; and

an electromagnetic element adapted to generate the electromagnetic field proximate to the reflector element to produce rotational movement of the reflector element about at least one axis relative to the data storage medium.

22. (new) The system of Claim 21, wherein the electromagnetic element is adapted to generate the electromagnetic field to produce lateral movement of the reflector element along the at least one axis.

23. (new) The system of Claim 21, wherein the electromagnetic element is adapted to generate the electromagnetic field to produce lateral movement of the reflector element along another axis different than the at least one axis.

24. (new) The system of Claim 21, wherein the electromagnetic element comprises at least two spaced apart conductive coils each extending in a direction substantially orthogonal to the at least one axis.

25. (new) The system of Claim 21, wherein the electromagnetic element is adapted to generate the electromagnetic field to produce focus movement of the reflector element relative to the data storage medium.

26. (new) The system of Claim 21, further comprising a controller adapted to vary a current applied to at least one of a plurality of conductive coils of the electromagnetic element to produce the rotational movement.

27. (new) The system of Claim 21, wherein the electromagnetic element comprises at least one conductive coil disposed on a printed circuit board.

28. (new) The system of Claim 21, wherein the electromagnetic element comprises a printed circuit board having at least one conductive coil disposed thereon formed by a conductive trace.

29. (new) A method for accessing a data storage medium, comprising:
directing an optical signal toward the data storage medium via a reflector element, the reflector element responsive to an electromagnetic field; and
controlling, via the electromagnetic field, rotational movement of the reflector element about at least one axis relative to the data storage medium.

30. (new) The method of Claim 30, further comprising controlling, via the electromagnetic field, lateral movement of the reflector element about the at least one axis.

31. (new) The method of Claim 30, further comprising controlling, via the electromagnetic field, lateral movement of the reflector element about another axis different than the at least one axis.

32. (new) The method of Claim 30, further comprising controlling, via the electromagnetic field, focus movement of the reflector element relative to the data storage medium.

33. (new) The method of Claim 30, further comprising generating the electromagnetic field via a printed circuit board having at least one conductive coil formed thereon.

34. (new) The method of Claim 30, further comprising generating the electromagnetic field via a printed circuit board having at least one conductive coil formed thereon by a conductive trace.

35. (new) The method of Claim 30, further comprising generating the electromagnetic field by selectively generating a current through at least one conductive coil disposed outside a boundary area of the reflector element.

36. (new) An electromagnetically controlled drive system for accessing a data storage medium, comprising:

means for reflecting an optical signal toward the data storage medium; and

means for controlling, via an electromagnetic field, rotational movement of the reflecting means about at least one axis relative to the data storage medium.

37. (new) The system of Claim 36, further comprising at least one conductive coil means formed on a printed circuit board for generating the electromagnetic field.

38. (new) The system of Claim 36, wherein the controlling means comprises means for controlling, via the electromagnetic field, lateral movement of the reflecting means about another axis different than the at least one axis .

39. (new) The system of Claim 36, further comprising means for generating the electromagnetic field having at least one conductive coil means formed by a conductive trace.

40. (new) An electromagnetically controlled drive system for accessing a data storage medium, comprising:

means for reflecting an optical signal toward the data storage medium, the reflecting means responsive to an electromagnetic field; and

at least one conductive coil means formed on a printed circuit board for generating the electromagnetic field.

41. (new) The system of Claim 40, wherein the at least one conductive coil means comprises a conductive trace formed on the printed circuit board.

42. (new) The system of Claim 40, further comprising a means for selectively varying a current direction through the at least one conductive coil means.

43. (new) The system of Claim 40, wherein the at least one conductive coil means is disposed outside a boundary area of the reflecting means.
44. (new) The system of Claim 40, further comprising a means for selectively varying a current amplitude generated through the at least one conductive coil means.
45. (new) An electromagnetically controlled drive system for accessing a data storage medium, comprising:
an electromagnetic element adapted to generate an electromagnetic field; and
a reflector element movable relative to the electromagnetic element in response to the electromagnetic field and adapted to direct an optical signal toward the data storage medium.
46. (new) The system of Claim 45, further comprising a support system adapted to movably support the reflector element relative to the electromagnetic element.
47. (new) The system of Claim 45, the reflector element movable in a lateral direction relative to the electromagnetic element.
48. (new) The system of Claim 45, the reflector element movable in a focus direction relative to the electromagnetic element.
49. (new) The system of Claim 45, the reflector element movable along at least one axis, and wherein the electromagnetic element comprises a plurality of conductive coils each extending longitudinally along the at least one axis.
50. (new) The system of Claim 45, wherein the electromagnetic element comprises a printed circuit board having at least one conductive coil disposed thereon.
51. (new) The system of Claim 45, wherein the electromagnetic element comprises at least one conductive trace formed on a printed circuit board to form a conductive coil.

52. (new) The system of Claim 45, wherein the electromagnetic element is adapted to generate the electromagnetic field to enable rotational movement of the reflector element about at least one axis.

53. (new) An electromagnetically controlled drive system for accessing a data storage medium, comprising:

means for generating an electromagnetic field; and

means for directing an optical signal toward the data storage medium, the directing means movable relative to the generating means in response to the electromagnetic field.

54. (new) The system of Claim 53, wherein the generating means comprises at least one conductive coil means disposed on a printed circuit board.

55. (new) The system of Claim 53, the directing means movable in a lateral direction relative to the generating means.

56. (new) The system of Claim 53, the directing means movable in a focus direction relative to the generating means.

57. (new) The system of Claim 53, the directing means rotationally movable relative to the generating means about at least one axis.

58. (new) A method for accessing a data storage medium, comprising:

generating an electromagnetic field proximate to a reflector element using an electromagnetic element; and

controlling, via the electromagnetic field, movement of the reflector element relative to the electromagnetic element to direct an optical signal toward the data storage medium from the reflector element.

59. (new) The method of Claim 58, wherein controlling comprises controlling, via the electromagnetic field, lateral movement of the reflector element along at least one axis relative to the electromagnetic element.

60. (new) The method of Claim 58, wherein controlling comprises controlling, via the electromagnetic field, focus movement of the reflector element relative to the electromagnetic element.

61. (new) The method of Claim 58, wherein generating the electromagnetic field comprises generating a current through at least one conductive coil formed on a printed circuit board of the electromagnetic element.

62. (new) The method of Claim 58, wherein generating the electromagnetic field comprises generating a current through at least one conductive trace formed on a printed circuit board of the electromagnetic element to form a conductive coil.